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C L A I M S

1.-Device for the infusion of coffee, which is character-  
ised in that it comprises a heat exchanger (1), an infusion  
5 mechanism (2) and a coffee dosage carrying mechanism (3) cou-  
pled vertically and integrally in continuation from the other  
and defining a longitudinal axis (Y-Y), in which the heat  
exchanger (1) is provided with water inlet means and water  
outlet means at a higher temperature; the infusion mechanism  
10 (2) comprises a water inlet chamber (25) coming from the heat  
exchanger (1) and an outlet chamber (26) adapted for receiving  
the dosage; and the dosage carrying mechanism (3) comprises a  
longitudinal movement mechanism provided with a drive arm (31),  
capable of rotating in both directions around said longitudinal  
15 axis (Y-Y), all of which is adapted in such a way that, once  
the dosage has been placed in the dosage carrying mechanism  
(3), the rotation of the drive arm (31) in one direction brings  
about the upward vertical movement of the dosage, placing it in  
the infusion mechanism (2) outlet chamber (26), whereas the  
20 rotation of the drive arm (31) in the opposite direction to the  
previous one brings about the downward movement of the dosage  
used, allowing its extraction.

2.-Device according to claim 1, which is characterised in  
25 that the infusion mechanism (2) comprises an intermediate body  
(4) fastened to the heat exchanger (1) and provided with a  
stepped centred through orifice (12), configuring three succes-  
sive portions in progressively decreasing section from top to  
bottom, in which the upper portion (13) is adapted for housing  
30 a tightening discoidal element (5), provided with a centred  
through orifice for the water coming from the heat exchanger  
(1), and a membrane (7), the water inlet chamber (25) being  
defined between the discoidal element (5) and the membrane (7),  
whereas the intermediate portion (14) and the lower portion  
35 (15) are adapted for housing a piston (8) provided with a  
centred through orifice (17), in which a retention valve (9),

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integral to the membrane (7) is housed and, at its lower end, to a cavity which configures the outlet chamber (26).

3.- Device according to claims 1 and 2, which is characterised in that the dosage carrying mechanism (3) comprises a tubular body (28) that houses a thrust body (29) and a dosage carrying body (30), all of them being arranged co-axially and mutually coupled, in which the tubular body (28) is provided at its upper end with means (32, 33) for its fastening to the intermediate body (4) of the infusion mechanism (2), and laterally, has spacious apertures (34) adapted for allowing the dosage to pass therethrough, before and after being used, and, at its lower end, has means (35, 37, 38, 39) for the coupling of the thrust body (29) and of the dosage carrying body (30); the thrust body (29) is fastened to the drive arm (31) and has a centred through orifice (49); and the dosage carrying body (30) has a cavity (43) for receiving a dosage and has outlet means (44, 45) of the infusion which go through the centred through orifice (49) of the thrust body (29).

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4.- Device according to claims 1 to 3, which is characterised in that the longitudinal movement mechanism comprises, both in the thrust body (29) and laterally, two radial thrust protuberances (40) adapted for being housed in respective thrust helicoidal grooves (46) which the dosage carrying body (30) is provided with, the dosage carrying body (30) also being provided with two radial guide protuberances (47) adapted for being housed in respective guide grooves (36) which the tubular body (28) is provided with, all of it being adapted in such a way that the rotation of the drive arm (31) causes the thrust body (29) to turn and the sliding of the radial thrust protuberances (40) through the thrust helicoidal grooves (46) of the dosage carrying body (30), which is thrust vertically, guided by the radial guide protuberances (47) through the guide grooves (36) in the direction corresponding to the rotation of the drive arm (31).

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